

ABSTRACT OF THE DISCLOSURE

A GaAs substrate 200 is rotated, a photosensitive silicone resist 260 is applied on a surface of the GaAs substrate 200 on which is located an aperture of a hole 310 to be a via hole, and an inside of the hole 310 to be the via hole is filled in with the photosensitive silicone resist 260. Next, the GaAs substrate 200 is further rotated, changing the number of revolutions (rpm), and the photosensitive silicone resist 260 on the GaAs substrate is flattened. Next, a reverse (second) side of the GaAs substrate is grinded, the hole 310 to be the via hole penetrates the GaAs substrate 200 from the first-side surface to the second-side surface, and the via hole 220 is formed. Next, a reverse (second) side electrode 240 is formed on the reverse side of the GaAs substrate 200. Next, the GaAs substrate 200 is divided chip by chip, and chips are laid on a substrate for assembly 270 via an adhesive metal 280.